

ABSTRACT

An apparatus and method for moving a carriage assembly from an initial position to a target position relative to a storage medium rotating at a circumferential velocity. A processor determines a velocity trajectory relative to the radial distance of the initial position and the target position to the center of the medium, the circumferential distance between the initial position and the target position, and the initial circumferential velocity of the medium. The processor directs the drive to move the carriage assembly using the velocity trajectory so that the carriage assembly will arrive radially and circumferentially at the target position at substantially the same time. Additionally, the rotation of the storage medium may be changed from the initial circumferential velocity to a target circumferential velocity.